

AMENDMENTS TO THE DRAWINGS

The attached new sheets of drawings include new Figures 4 and 5.

Attachment: New Sheets (2)

REMARKS

Claims 1-31 are pending in the current application. Claims 8-31 are withdrawn. Claims 1-7 are amended by this Amendment. No claims are canceled or added by this Amendment.

Drawings

The Examiner objects to the drawings under 37 CFR 1.83(a). The Examiner asserts the drawings must show the group of users, the network, and the method and each method step stated in the claims. Applicant respectfully submits that new sheets including new FIGS. 4 and 5 show the group of users 20, the network 40, and the method and each method step stated in the independent claim.

In view of the above, Applicant respectfully requests the objections to the drawings be withdrawn.

Specification

The Examiner objects to the abstract of the disclosure because of implied phrases. Applicant respectfully submits the abstract as amended above does not include implied phrases and is in proper format.

Further, Applicant respectfully submits a substitute specification (clean and marked-up) is submitted so as to amend the specification to include reference to the newly submitted FIGS. 4 and 5. Applicant submits that no new matter is included by the amendments to the specification. In particular, Applicant respectfully submits that support is provided at least at paragraphs [0023] to [0025] of the substitute specification for the amendments to the specification and drawings.

In view of the above, Applicant respectfully requests entry of the substitute specification and that the objections to the abstract be withdrawn.

Claim Rejections under 35 U.S.C. § 112

Claims 1-7 stand rejected under 35 U.S.C. § 112, first paragraph, as allegedly failing to comply with the written description requirement. Applicant respectfully traverses this rejection.

The Examiner asserts the specification inadequately describes the claims and method steps as stated in claims 1-7. Applicant respectfully submits that the specification clearly describes the subject matter of claims 1-7 in such a way to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention. For example, Applicant respectfully submits that at least paragraphs [0034] to [0041] provide an adequate written description for various features recited in the claims. Applicant respectfully requests that if the Examiner wishes to maintain his rejection under 35 U.S.C. § 112, first paragraph, that he provide a more specific description of his rejections and the portions of the claims to which the rejections apply.

In view of the above, Applicant respectfully requests the rejections under 35 U.S.C. § 112, first paragraph, be withdrawn.

Claim Rejections

Claims 1-7 stand rejected under 35 U.S.C. § 102(a) as allegedly being anticipated by SIEMANS and SAMSUNG as listed in the European Search Report of April 21, 2005. Claims 1-7 stand rejected under 35 U.S.C. § 102(b) as allegedly being anticipated by Li (EP 1213939, herein Li). Applicant respectfully traverses this rejection.

SAMSUNG is directed towards preventing user equipment from having to simultaneously monitor multiple paging channels by conveying MBMS paging indicators in a paging channel frame. However, SAMSUNG does not disclose, teach or suggest quick paging

channels, much less inserting indicator bits into a quick paging channel and the advantages thereof.

Further, SAMSUNG uses the very end of a Paging Indicator Channel where a set of bits (288 bits) are used for unicast paging, then the last unallocated reserved bits of the channel (12 bits) are apportioned as broadcast/multicast (BCMC) paging indicators. As a result, with a large number of broadcast/multicast groups, there will be substantial contention (i.e., competition) for the use of these BCMC paging indicators by groups of BCMC users. (see Figure 1 and Table 1 in SAMSUNG). In other words, since there is only 12 bits allocated at the end of the PICH for BCMC paging indicator bits, there is much more likelihood that an indicator assigned for a particular unicast mobile and for a particular BCMC group will be the same. This can cause a drain on system resources, an unnecessary waste of battery life, as well as a potential recipe for system or service delay.

On the contrary, amended claim 1 permits these indicator bits to be distributed across an entire slot of the quick paging channel - this allows better scalability to support paging indicators for a much larger number of BCMC groups than is possible by the configuration shown in SAMSUNG. In very infrequent cases, a unicast paging indicator for a particular mobile and for a particular BCMC group could be the same - however, any potential contention in this case would be most infrequent.

Accordingly, SAMSUNG fails to disclose “assigning a plurality of indicator bits of a sequence of indicator bits which are distributed across an entire slot of a quick paging channel to indicate a transmission of signaling information related to broadcast-multicast service that is related to the group” as required by amended claim 1.

SEIMENS is directed to a mechanism for notifying a group of idle and URA/CELL_PCH UEs by using paging. However, similar to SAMSUNG, SIEMENS does not disclose quick

paging channels, much less inserting indicator bits into a paging channel and the advantages thereof. Further, also similar to SAMSUNG, SIEMENS does not disclose “assigning a plurality of indicator bits of a sequence of indicator bits which are distributed across an entire slot of a quick paging channel to indicate a transmission of signaling information related to broadcast-multicast service that is related to the group” as required by amended claim 1.

Li is directed to a communications system having a downlink channel for transmitting messages from a network to user terminals. In particular, the downlink channel in Li includes a paging channel and a paging indicator channel for transmission of a paging indicator to a paging group. However, like SAMSUNG, Li also fails to the use of a quick paging channel, much less assigning a plurality of indicator bits of a quick paging channel to indicate transmission of signaling information. To the contrary, Li merely discloses at paragraph [0029] the user terminal detects a single paging indicator 23. Further, also similar to SAMSUNG, Li fails to disclose indicator bits to be distributed across an entire slot of the quick paging channel. To the contrary, Li discloses at paragraph [0023] the paging indicator channel 20 transfers paging indicators 23 which appear periodically on the paging indicator channel 20 when there are paging messages for any of the user terminals belonging to a paging group. Accordingly, Li does not disclose “assigning a plurality of indicator bits of a sequence of indicator bits which are distributed across an entire slot of a quick paging channel to indicate a transmission of signaling information related to broadcast-multicast service that is related to the group” as required by amended claim 1.

Accordingly, Applicant respectfully submits that amended claim 1 is patentable for at least the above reasons. Further, Applicant submits that claims 2-7, which depend from amended claim 1, are patentable for at least the same reasons discussed above in regards to amended claim 1 as well as on their own merits.

In view of the above, Applicant respectfully requests the rejections under 35 U.S.C. § 102(a) and 35 U.S.C. § 102(b) be withdrawn.

CONCLUSION

Accordingly, in view of the above amendments and remarks, reconsideration of the objections and rejections and allowance of each of the claims in connection with the present application is earnestly solicited.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Gary D. Yacura at the telephone number of the undersigned below.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 08-0750 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17; particularly, extension of time fees.

Respectfully submitted,

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